We Claim:

1. A method for controlling Listeria contamination in a food product, on food processing equipment, or on food storage containers, comprising applying lytic phage P100, ATCC patent deposit designation no. PTA-4383, to a food product or food processing equipment in an amount sufficient to reduce the amount of Listeria.
2. The method according to claim 2, wherein said P100 is applied in combination with phage A511, ATCC patent deposit designation no. PTA-4608.
3. The method according to claim 1, wherein said lytic phage is applied in combination with at least one agent selected from the group consisting of listeriolysin, a surface disinfectant, an antibiotic, a surfactant, an enzyme, and a phage specific for bacterial contaminants other than Listeria monocytogenes.
4. The method according to claim 1, wherein said food product is a dairy product.
5. The method according to claim 1, wherein said food product is an unpasteurized food product.
6. The method according to claim 1, wherein said food product is a meat product.
7. The method according to claim 6, wherein said meat product is a ready to eat meat product.
8. The method according to claim 1, wherein said food product is a fish product.
9. The method according to claim 1, wherein said food storage container is a salad bar and said food product is salad.
10. The method according to claim 1, wherein said food processing equipment is selected from the group consisting of a tube through which milk is being pumped, a high-salt content tank for processing cheese, a container from which cultures are applied to a surface of a cheese, a set of shelves on which a product is dried and cured, and a floor drain.
11. The method according to claim 1, wherein said lytic phage are applied by mixing with a liquid or semi-solid food product.
12. The method according to claim 1, wherein said lytic phage are mixed with a liquid and sprayed onto a surface selected from the group consisting of food products, food processing equipment and food storage containers.

13. The method according to claim 12 wherein said lytic phage are applied to said food processing equipment in combination with an agent selected from the group consisting of listeriolysin, a surface disinfectant, an antibiotic, a surfactant, an enzyme, and a phage specific for bacterial contaminants other than Listeria monocytogenes.

14. The method according to claim 1, wherein said lytic phage are lyophilized or cryopreserved by vitrification and applied in a dry form to said food product, food processing equipment and food containers.

15. A composition comprising phage P100, ATCC patent deposit designation number PTA-4383 and a carrier.

16. The composition according to claim 15, further comprising phage A511, ATCC patent deposit designation number PTA-4608.

17. The composition according to claim 15, further comprising an agent selected from the group consisting of listeriolysin, a surface disinfectant, an antibiotic, a surfactant, an enzyme, and a phage specific for bacterial contaminants other than Listeria monocytogenes.

18. The composition according to claim 15, wherein said carrier is a pharmaceutically acceptable carrier.

19. A method for treating an animal infected with Listeria monocytogenes comprising administering an amount of P100 suitable to reduce or eliminate said Listeria monocytogenes.

20. The method according to claim 19, further comprising administering phage A511.

21. Phage P100 deposited at the American Type Culture Collection, ATCC patent deposit designation number PTA-4383.

22. A method for detecting the presence of Listeria monocytogenes, comprising
obtaining a sample suspected to contain Listeria monocytogenes,
incubating said sample with P100 according to claim 21, and
detecting any change in said sample caused by P100, as an indication of the presence of Listeria monocytogenes.

23. The method according to claim 22, wherein said change in said sample is due to lysis by P100 or a detectable label or signal.

24. The method according to claim 22, further comprising recombinantly inserting a gene construct into the genome of P100 before incubation with said sample, wherein expression of said gene construct results in a detectable signal in the presence of Listeria monocytogenes.

25. The method according to claim 24, wherein said gene construct encodes a bio-luminescent protein.

26. The method according to claim 25 wherein said bioluminescent protein is selected from the group consisting of luciferase and a fluorescent protein.

27. The method according to claim 26, wherein said luciferase is from bacteria or insects.

28. The method according to claim 26, wherein said fluorescent protein is green fluorescent protein or a variant thereof.

29. The method according to claim 22, further comprising immobilizing said Listeria monocytogenes on a solid support and detecting any change on said solid support.

30. The method according to claim 29, wherein said Listeria monocytogenes are immobilized using anti-Listeria antibodies.

31. The method according to claim 30, wherein said solid support is a test strip.

32. The method according to claim 22, wherein said sample is obtained from a patient suspected of being infected with Listeria monocytogenes.

33. The method according to claim 22, wherein said sample is obtained from a food product, food processing equipment or food storage containers.

34. A purified endolysin protein derived from phage P100.

35. A method for controlling Listeria contamination in a food product, on food processing equipment or on food storage containers, comprising applying the endolysin protein according to claim 34, to a food product, food processing equipment or food storage container in an amount sufficient to reduce the amount of Listeria.

36. The method according to claim 35, further comprising applying at least one variety of lytic phage from the Myoviridae family to said food product, food processing equipment or food storage container.

37. The method according to claim 35, wherein said lytic phage is selected from the group consisting of P100 and A511.

38. The method according to claim 35, wherein said endolysin is recombinantly produced.

39. The method according to claim 35, further comprising applying endolysin from at least one other phage which infects Listeria or another bacterial genera.

40. The method according to claim 39, wherein said other phage is A511.

41. The protein according to claim 34, wherein said endolysin protein is recombinantly produced.

42. A composition for controlling Listeria contamination in a food product, on food processing equipment or on food storage containers comprising endolysin protein derived from phage P100 according to claim 34, and a suitable carrier.

43. The composition according to claim 42, further comprising at least one variety of lytic phage from the Myoviridae family.

44. The composition according to claim 43, wherein said lytic phage are selected from the group consisting of P100 and A511.

45. The composition according to claim 42, wherein said endolysin is recombinantly produced in a host bacteria.

46. The method according to claim 22, wherein a gene construct has been recombinantly inserted into P100 in order to provide or emit a signal confirming the detection of Listeria monocytogenes.

47. The method according to claim 46, wherein said gene construct is selected from the group consisting of genes encoding luciferase and green fluorescent protein.